



PERCEPTION OF MEDICAL STUDENTS ABOUT BED SIDE TEACHING IN GOVERNMENT MEDICAL COLLEGE OF NORTH COASTAL ANDHRA PRADESH

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ABSTRACT

Background: Bedside teaching is the core teaching strategy for acquiring clinical skills in the Undergraduate medical curriculum. The growing concern among medical fraternity and students that the teaching learning methodology in bed side clinics is not optimal. **Aim:** To know the perceptions of final MBBS students on bed side clinical teaching. **Methodology:** An observational cross sectional study was carried out in Government medical college in Visakhapatnam among Final year part -2 Under graduate students. A purposive sample of 120 final MBBS students was taken during the months of September and October of 2019. A validated structured questionnaire modified to an Indian scenario containing questions to rate various aspects such as learning climate, Focus on student learning, Developing and delivering a tutorial, and overall impression of the teaching on a linkert scale of grading 1 to 5 was used. It was validated by doing a pilot study and applying cronbach's alpha [0.89] which is significant. Students were given a self-administered questionnaire using KOBO TOOLBOX & COLLECT. Consent from willing participants is obtained through the Google forms platform and analysis was done using Excel and SPSS DEMO VERSION 17. **Results:** Out of 120 students, 30 students each from the department of medicine, surgery, obstetrics and gynecology, pediatrics participated in the study. Mean score of domains was high among students posted in medicine department and low among students posted in pediatric department. Difference between mean scores among four departments under learning climate ($p=0.002$), focus ($p=0.018$) and developing tutorial ($p=0.013$) domains was found Statistically Significant. **Conclusion:** The overall perception of final MBBS students on bed side teaching is ranging between average to good. Clinical teachers should be moving towards excellence and not just to be stopped at good.

KEY WORDS: Bed side teaching (BST), Undergraduate, Medical education, Clinical teachers.

INTRODUCTION:

Bed side teaching (BST) is the core teaching strategy for acquiring clinical skills in the Undergraduate medical curriculum. Institutions wishing to develop and implement better bedside teaching should prioritize recruitment of expert clinical teachers, recognizing their time and efforts¹. Bedside teaching is fundamental component of Clinical training and an essential tool in the creation of a competent Physician. Sir William Osler (1849-1919), one of Canada's most renowned physicians, was the first to introduce BST to medical education in 1892. He described modern medical education as something that needed to be taught at the bedside: "Medicine is learned by the bedside and not in the classroom"². Although bedside teaching is considered to be a valuable teaching tool in clinical medicine, several surveys indicate that clinical teaching is moving away from the patient's bedside into conference rooms and hallways. Estimates of time actually spent at the bedside vary from 15% to 25%. The reasons for this decline are not completely clear⁶. The fervent power of bedside teaching is that it makes patients and their illnesses tangible, thus helping the student to comprehend the disease in its entirety⁷. The growing concern among medical fraternity and students that the teaching learning methodology in bed side clinics is not optimal. Previous reports document diminishing time spent on bed side teaching in present days with a shift more towards conference and corridor rooms. Hence, the current study has been under taken to assess the perception of medical students on bed side clinical teaching in medical college in government setup.

OBJECTIVES:

1. To know the Perceptions of final MBBS students on bed side clinical teaching.
2. To compare various departments on bed side teaching.

METHODOLOGY:

Study Design:

An Observational Cross Sectional analytical study.

Study Setting:

Government medical college in north coastal Andhra Pradesh.

Study Participants:

Final year part -2 under graduate students in government medical college in north coastal Andhra Pradesh.

Sampling Technique:

A purposive sample of 120 final MBBS students in Government Medical College.

Study Period:

September and October of 2019.

Inclusion Criteria:

Final year MBBS students who are attending their clinical postings in medicine, surgery, obstetrics and gynecology, pediatrics at KGH during study period and willing to participate in the study.

Exclusion Criteria:

Students who have not attended the postings and not given consent.

Study Tool:

A validated structured questionnaire containing questions to rate various aspects such as learning climate, Focus on student learning, Developing and delivering a tutorial and overall impression of the teaching on linkert scale of grading 1 to 5; 1=bad, 2=poor, 3=average, 4=good, 5=excellent was used based on a study by L. Green-Thompson, P. Mcinerney³, for bed side teaching, adopted to Indian scenario which was validated by doing a pilot study and applying cronbach alpha [0.89] which is significant.

Study Variables:

Under four broad headings- Learning climate, Focus on student learning, Delivering and developing the tutorial, conclusion and an overall impression.

Data Collection Method:

All the study subjects were given self-administered questionnaire through KOBO TOOL BOX application in android mobile phones. They were asked to fill their perception about their completed clinical ward posting.

Ethical Considerations:

Participation in the study was voluntary – participants were assured that their responses would be treated confidentially and that the completed evaluation forms would not be shown to the teachers. Permissions were obtained from Head of the institute and concerned Head of the departments. Consent was obtained from the participants who are willing to participate in the study through Google forms platform.

Data Analysis:

Excel sheet was derived from KOBO TOOL BOX account after data entry using KOBO COLLECT, analysis done using SPSS DEMO VERSION 17. Continuous variables were expressed as Mean and standard deviation, categorical variables were expressed as proportions. Applied ANOVA for statistical analysis.

RESULTS:

All 120 students' opinions were obtained. 30 students were selected from each

department.

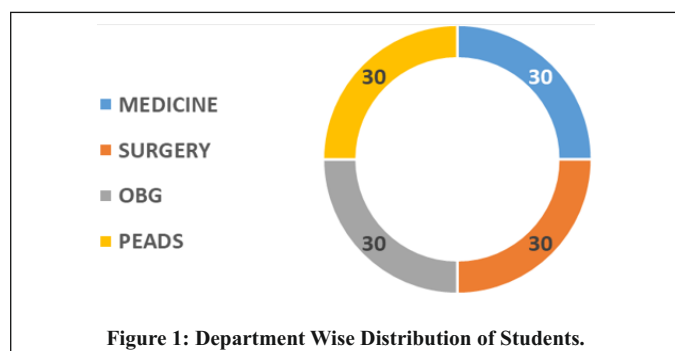


Figure 1: Department Wise Distribution of Students.

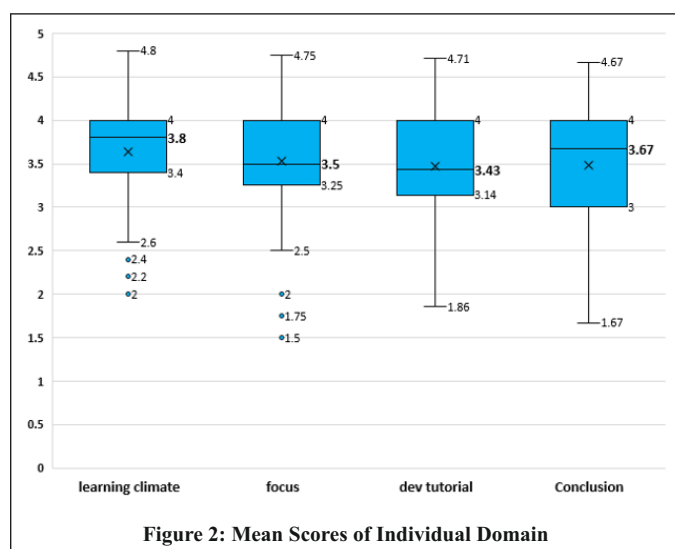


Figure 2: Mean Scores of Individual Domain

Mean score for Learning climate domain is maximum (3.63 ± 0.5), while for the domain of developing a tutorial minimum (3.47 ± 0.61) mean score was observed.

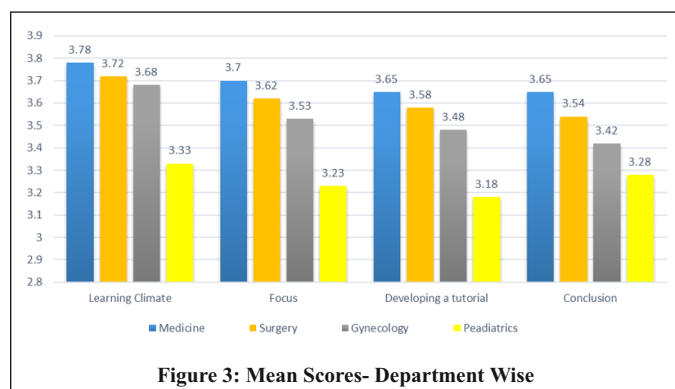


Figure 3: Mean Scores- Department Wise

Mean score was high among students posted in medicine department and low among students posted in pediatric department.

Difference between mean scores among four departments under learning climate ($p=0.002$), focus ($p=0.018$) and developing tutorial ($p=0.013$) domains was found Statistically Significant.

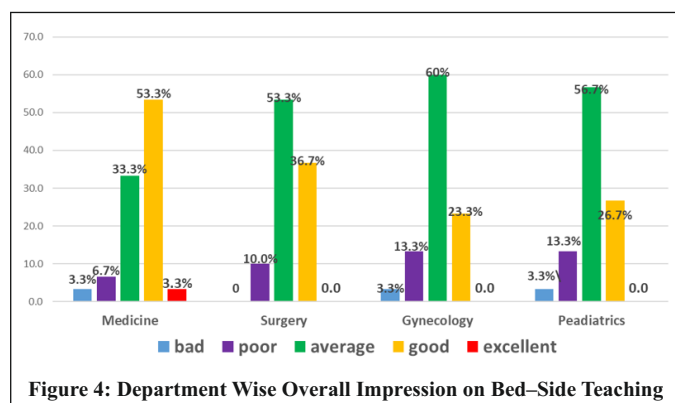


Figure 4: Department Wise Overall Impression on Bed-Side Teaching

The overall student's perception was ranging between average to good. The mark of excellent (3.3%) was found only in medicine students group.

Table 1: Domains: Learning climate and Focus on student learning

Characteristics	Appropriate treatment to patient was done	Tutor willing to listen	Encouragement given with positive reinforcement	Students treated with equal respect	Establishing rapport with the students
Mean (SD)	3.98(0.74)	3.61(0.74)	3.49(0.82)	3.58(0.93)	3.49(0.64)
Characteristics	Students motivation to learn	Opportunities for questions and feedback	Challenges faced during learning	Opportunities to learn clinical examination skills	
Mean (SD)	3.56(0.88)	3.53(0.93)	3.31(0.78)	3.66(0.92)	

Rating used a scale of grading 1 to5; (1=bad, 2=poor, 3=average, 4=good, 5=excellent)

From the above table1, lowest mean score was observed in question pertaining to strategies used to gain and maintain attention (3.05). Whereas in student learning domain lowest mean score were obtained for the question linked with challenges faced during learning (3.31)

Table 2: Delivering and developing tutorial

Characteristics	Clear and coherent communication of ideas	Logical development of the tutorial	Tutor enthusiasm about the subject	Tutor knowledge about the subject	Use of Strategies	Confidence of student to do bedside examination Independently	Topic integration with all aspects of health care
Mean (SD)	3.37 (0.92)	3.38 (0.84)	3.79 (0.84)	4.19 (0.79)	3.05 (0.89)	3.18 (0.94)	3.37(0.84)

Rating used a scale of grading 1 to5; (1=bad, 2=poor, 3=average, 4=good, 5=excellent)

Table 3: Conclusion

Characteristics	Was the tutorial drawn to a satisfactory conclusion	Summary of the main ideas	Given guidance and encouragement
Mean (SD)	3.63 (0.67)	3.53 (0.84)	3.29(1.05)

Rating used a scale of grading 1 to5; (1=bad, 2=poor, 3=average, 4=good, 5=excellent)

DISCUSSION:

In the current study the results show that BST in a government medical college is ranging between average to good in the view of final year MBBS students who are study subjects.

Mean score of Delivering and developing the tutorial compared to other domains was low (3.47) in all the four groups of the study. So, it needs improvement in the aspects of clear and coherent communication of ideas, logical development of tutorial, strategies to gain and maintain attention, tutor enthusiasm and knowledge about the subject, making student confident enough to do bed side clinical examination and integration of topic with all aspects of health care.

A study conducted by Sultana J et al5 showed a overall mean score on the basis of teaching tasks of the teachers is 3.12, whereas our study domain similar to that i.e delivering and developing a tutorial showed a higher mean score of 3.47. The aspect of physical environment in Sultana J et al5 obtained 2.75 mean score and similar domain in our study focus on student learning got a better mean score of 3.5.

A study by Shahriari M. (2014)4 on under graduates and pediatric residents showed 80% better scores after bed side teaching, in our study the mean scores of the study domains in pediatrics department were low when compared to other departments, it is therefore ,the newer approaches of effective bedside teaching ,and the core focus of all such approaches in educational process will have significant effect on patient care in future practice of today's students.

CONCLUSION & RECOMMENDATIONS:

The overall perception of final MBBS students on bedside teaching is ranging from average to good. Clinical teachers should be moving toward excellence and not just be stopped at good. Physicians must prioritize teaching and learning physical examination skills. Ideally, clinical teachers should master the art of combining both patient care and educational activities. History-taking, physical examination, logical reasoning, clinical diagnosis, communication, professionalism, touch, respect, empathy, and most importantly, what it takes and means to be a doctor are best taught, exemplified, role-modeled, and learned in the presence of patients and effective bedside teaching strategies. There should be an increasing emphasis on following student-centric learning methods in contrast with the teacher-centric approaches. Students should be playing an active role in learning, with teachers playing the roles of facilitators and mentors to help them develop their clinical skills. Summary of the main ideas and feedback should be an important component of learning and act as a bridge between mentor and mentee where both would be equally benefitted. Topic integration with all aspects of health care also promotes a holistic approach to patient care.

LIMITATIONS:

The results observed in the present study are based on a cross-sectional study on a small group. A longitudinal study with follow-up will give us a better understanding of the teaching practices and student perceptions.

Conflicts of interest: NIL

Funding sources: Nil

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